## INTERNATIONAL SEARCH REPORT

nat Application No PCT/JP2004/010976

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C23C18/31 C23C18/28

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC  $\frac{7}{2}$  C23C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

	ENTS CONSIDERED TO BE RELEVANT	
Calegory °	Citation of document, with Indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 2004/033754 A (TOYOTA JIDOSHA KABUSHIKI KAISHA; HIRAOKA, MOTOKI; BESSHO, TAKESHI; SIB) 22 April 2004 (2004-04-22) claims 1-8; pages 16-17;	1-5
X .	ANONYMOUS: "Polyimide surface modification by ozonlysis" RESEARCH DISCLOSURE, KENNETH MASON PUBLICATIONS, HAMPSHIRE, GB, vol. 339, no. 37, July 1992 (1992-07), XP007117898 ISSN: 0374-4353 the whole document ————————————————————————————————————	1,2,4,5

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents:      A* document defining the general state of the art which is not considered to be of particular relevance      E* earlier document but published on or after the International filing date      L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)      O* document referring to an oral disclosure, use, exhibition or other means      P* document published prior to the international filing date but later than the priority date claimed	<ul> <li>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> </ul>
Date of the actual completion of the International search	Date of mailing of the international search report
24 February 2005	04/03/2005
Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Ramos Flores, C

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## INTERNATIONAL SEARCH REPORT

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PCT/JP2004/010976

	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	Relevant to claim No.
alegory *	Citation of document, with Indication, where appropriate, of the relevant passages	Helevant to claim No.
X	EP 0 485 699 A (INTERNATIONAL BUSINESS MACHINES CORPORATION) 20 May 1992 (1992-05-20) claims, col. 8, line 45 to col. 10, line 45	1,2,4,5
X	US 5 803 131 A (IWASA ET AL) 8 September 1998 (1998-09-08) claims, col. 8, line 58 to col. 10, line 27	1-5
A	PATENT ABSTRACTS OF JAPAN vol. 013, no. 302 (C-616), 12 July 1989 (1989-07-12) & JP 01 092377 A (NIPPON OZON KK), 11 April 1989 (1989-04-11) abstract	1-5
X	WO 02/088422 A (TOYOTA JIDOSHA KABUSHIKI KAISHA; NAKANISHI, MASATSUGU; BESSHO, TAKESHI) 7 November 2002 (2002-11-07) the whole document	<b>1–5</b>
P,X	EP 1 380 671 A (TOYOTA JIDOSHA KABUSHIKI KAISHA) 14 January 2004 (2004-01-14) the whole document	1-5
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## INTERNATIONAL SEARCH REPORT

formation on patent family members

Int onal Application No
PCT/JP2004/010976

Patent document cited in search report					Patent family member(s)			
WO	2004033754	Α	22-04-2004	JP	2004131807		30-04-2004	
				WO	2004033754	A2 	22-04-2004	
EP	0485699	A	20-05-1992	US		Α	07-06-1994	
				EP		A2	20-05-1992	
				JP		B2	10-02-1998	
				JP	4232278	Α	20-08-1992	
US	5803131	A	08-09-1998	JP	3031177	B2	10-04-2000	
				JP	8092752	Α	09-04-1996	
				JP	8091063	Α	09-04-1996	
				JP	8269723	A	15-10-1996	
JP	01092377	Α	11-04-1989	NONE				
WO	02088422	A	07-11-2002	JP	2002309377	Α .	23-10-2002	
				BR	0208938	Α	20-04-2004	
				ΕP	1380671	A1	14-01-2004	
				WO		A1	07-11-2002	
				MX		Α	26-03-2004	
				US	2004115353	A1	17-06-2004	
EP	1380671	Α	14-01-2004	JP		A	23-10-2002	
				BR		Α	20-04-2004	
				EP		A1	14-01-2004	
				MX	PA03009267	Α	26-03-2004	
			,	US	2004115353		17-06-2004	
				WO	. 02088422	A1	07-11-2002	